Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Please cancel claims 6 and 26 and amend claims 1-5, 7-25, and 27 as follows:

1. (currently amended) A~~n~~ hydrolytically stable isoelectric hydrogel material ~~comprising a single isoelectric compound having a defined pI value from 1 to 12 being incorporated into a hydrogel~~ formed by mixing and/or reacting a mixture comprising an oligo- or polyhydroxy compound, ~~with the~~ a single isoelectric compound having a pI value of from 1 to 12, and a difunctional or oligofunctional ~~crosslinker~~agent, ~~wherein~~ whereby after said mixed and/or reacting ~~incorporation of the single isoelectric compound into the hydrogel,~~ the hydrolytically stable isoelectric hydrogel material formed becomes an ampholytic material.

2. (currently amended) The hydrolytically stable isoelectric hydrogel material according to claim 1, wherein said hydrolytically stable isoelectric hydrogel material ~~having~~ has a pI value which does not substantially change when the ~~extent of incorporation~~amount of the isoelectric compound mixed and/or reacted is altered, ~~as long as~~ with the proviso that the concentration of the single isoelectric compound mixed and/or ~~in~~ reacted ~~the hydrogel~~ is higher than the concentration of the single isoelectric compound mixed and/or reacted that ~~what~~ is required to establish a pH in the hydrolytically stable isoelectric hydrogel material which is substantially equal to the pI value of the single isoelectric compound.

3. (currently amended) The hydrolytically stable isoelectric hydrogel material according to claim 1~~claim 1 or 2~~ wherein the single isoelectric compound mixed and/or reacted ~~for preparing acidic isoelectric hydrogels~~ is selected from the group consisting of iminodicarboxylic acids, alkyliminodicarboxylic acids, aryliminodicarboxylic acids, iminooligocarboxylic acids, aminodicarboxylic acids, alkylaminodicarboxylic acids, arylaminodicarboxylic acids, alkylarylaminodicarboxylic acids, aminooligocarboxyiic acids, alkylaminooligocarboxylic acids, arylaminooligocarboxylic acids, alkylarylaminooligocarboxylic acids, oligoaminooligocarboxylic acids, iminodiphosphonic acids, alkyliminodiphosphonic acids, aryliminodiphosphonic acids, iminooligophosphonic

acids, aminophosphonic acids, alkylaminophosphonic acids, arylaminophosphonic acids, alkylaryiaminophosphonic acids, aminodiphosphonic acids, alkylaminodiphosphonic acids, arylaminodiphosphonic acids, alkylarylaminodiphosphonic acids, aminooligophosphonic acids, alkylaminooligophosphonic acids, arylaminooligophosphonic acids, alkylarylaminooligophosphonic acids, oligoaminooligophosphonic acids, aminophenols, aminodiphenols, amino oligophenols, oligoamino oligophenols, iminodiphenols, and compounds containing combinations of the functional groups thereof.

4. (currently amended) The hydrolytically stable isoelectric hydrogel material according to claim 3 wherein the single isoelectric compound mixed and/or reacted is selected from the group consisting of iminodiacetic acid with a pI value of pI < 2.5, aspartic acid with a pI value of pI < 3, and glutamic acid with a pI value of pI < 4.

5. (currently amended) The hydrolytically stable isoelectric hydrogel material according to claim 1~~claim 1 or 2~~ wherein the single isoelectric compound mixed and/or reacted ~~for preparing basic isoelectric hydrogels~~ is selected from the group consisting of diaminocarboxylic acids, diaminophenols, diaminophosphonic acids, oligoaminocarboxylic acids, oligoaminophenols, oligoaminophosphonic, and compounds containing combinations of the functional groups thereof.

6. (canceled)

7. (currently amended) The hydrolytically stable isoelectric hydrogel material according to claim ~~6~~ 1 wherein the difunctional or oligofunctional agent mixed and/or reacted is selected from the group consisting of diepoxides, dihalides, and epihalohydrines.

8. (currently amended) An hydrolytically stable isoelectric hydrogel material formed by mixing and/or reacting a mixture comprising ~~comprising~~ an isoelectric compound having a ~~defined~~ pI of from 1 to 12 ~~being incorporated into and/or grafted onto a suitable~~ and an oligomeric or polymeric scaffold, wherein the hydrolytically stable isoelectric hydrogel material formed thereby ~~that~~ can be subsequently turned into an hydrogel and/or a membrane, and whereby~~wherein~~ after ~~incorporation of the isoelectric compound~~said mixing and/or reacting the hydrolytically stable hydrogel material becomes an ampholytic material.

9. (currently amended) The hydrolytically stable isoelectric hydrogel material

according to claim 8, wherein said hydrolytically stable isoelectric hydrogel material ~~having~~ has a pI value which does not substantially change when the ~~extent of incorporation~~amount of the isoelectric compound mixed and/or reacted is altered, ~~as long as~~with the proviso that the concentration of the single isoelectric compound mixed and/or reacted ~~in the hydrogel~~ is higher than the concentration of the single isoelectric compound mixed and/or reacted that ~~what~~ is required to establish a pH in the hydrolytically stable isoelectric hydrogel which is substantially equal to the pI value of the single isoelectric compound.

10. (currently amended) The hydrolytically stable isoelectric hydrogel material according to claim 8 ~~or 9~~ wherein the single isoelectric compound ~~for preparing acidic isoelectric hydrogels~~reacted is selected from the group consisting of iminodicarboxylic acids, alkyliminodicarboxylic acids, aryliminodicarboxylic acids, iminooligocarboxylic acids, aminodicarboxylic acids, alkylaminodicarboxylic acids, arylaminodicarboxylic acids, alkylarylaminodicarboxylic acids, aminooligocarboxylic acids, alkylaminooligocarboxylic acids, arylaminooligocarboxylic acids, alkylarylaminooligocarboxylic acids, oligoaminooligocarboxylic acids, iminodiphosphonic acids, alkyliminodiphosphonic acids, aryliminodiphosphonic acids, iminooligophosphonic acids, aminophosphonic acids, alkylaminophosphonic acids, arylaminophosphonic acids, alkylarylaminophosphonic acids, aminodiphosphonic acids, alkylaminodiphosphonic acids, arylaminodiphosphonic acids, alkylarylaminodiphosphonic acids, aminooligophosphonic acids, alkylaminooligophosphonic acids, arylaminooligophosphonic acids, alkylarylaminooligophosphonic acids, oligoaminooligophosphonic acids, aminophenols, aminodiphenols, amino oligophenols, oligoamino oligophenols, iminodiphenols, and compounds containing combinations of the functional groups thereof.

11. (currently amended) The hydrolytically stable isoelectric hydrogel material according to claim 10 wherein the single isoelectric compound mixed and/or reacted is selected from the group consisting of iminodiacetic acid with a pI value of $pI < 2.5$, aspartic acid with a pI value of $pI < 3$, and glutamic acid with a pI value of $pI < 4$.

12. (currently amended) The hydrolytically stable isoelectric hydrogel material according to claim 8 ~~or 9~~ wherein the isoelectric compound mixed and/or reacted ~~for preparing basic isoelectric hydrogels~~ is selected from the group consisting of

diaminocarboxylic acids, diaminophenols, diaminophosphonic acids, oligoaminocarboxylic acids, oligoaminophenols, oligoaminophosphonic, and compounds containing combinations of the functional groups thereof.

13. (currently amended) The hydrolytically stable isoelectric hydrogel material according to ~~any one of claims 8 to 12~~claim 8 wherein the oligomeric or polymeric scaffold mixed and/or reacted is selected from the group consisting of unhydrolyzed or partially hydrolyzed poly(epihalohydrine)s, poly(vinyl alcohol)s and their derivatives, unhydrolyzed or partially hydrolyzed poly(vinyl acetate)s and their derivatives, hydrolyzed or partially hydrolyzed poly(vinyl chloride)s, oligo- and polysaccharides and their derivatives.

14. (currently amended) The hydrolytically stable isoelectric hydrogel material according to claim 8 formed by reacting iminodiacetic acid, poly(vinyl alcohol) and glycerol diglycidyl ether in the presence of NaOH.

15. (currently amended) The hydrolytically stable isoelectric hydrogel material according to claim 8 formed by reacting aspartic acid, poly(vinyl alcohol) and glycerol diglycidyl ether in the presence of NaOH.

16. (currently amended) The hydrolytically stable isoelectric hydrogel material according to claim 8 formed by reacting glutamic acid, poly(vinyl alcohol) and glycerol diglycidyl ether in the presence of NaOH.

17. (currently amended) The hydrolytically stable isoelectric hydrogel material according to claim 8 formed by reacting iminodiacetic acid, poly(vinyl alcohol) and poly(ethylene glycol) diglycidyl ether in the presence of NaOH.

18. (currently amended) The hydrolytically stable isoelectric hydrogel material according to claim 8 formed by reacting aspartic acid, poly(vinyl alcohol) and poly(ethylene glycol) diglycidyl ether in the presence of NaOH.

19. (currently amended) The hydrolytically stable isoelectric hydrogel material according to claim 8 formed by reacting glutamic acid, poly(vinyl alcohol) and poly(ethylene glycol) diglycidyl ether in the presence of NaOH.

20. (currently amended) The hydrolytically stable isoelectric hydrogel material according to claim 8 formed by reacting lysine, poly(vinyl alcohol) and glycerol diglycidyl

ether in the presence of NaOH.

21. (currently amended) A hydrolytically stable hydrogel membrane comprising an hydrolytically stable isoelectric material according to ~~any one of claims 1 to 20~~claim 1 supported on an inert or crosslinkable or crosslinked substrate.

22. (currently amended) The hydrolytically stable hydrogel membrane according to claim 21 wherein the substrate is selected from the group consisting of materials made of poly(vinyl alcohol) and its derivatives, partially or fully hydrolysed poly(vinyl acetate) and its derivatives, partially or fully hydrolysed poly(epihalohydrine) and its derivatives, partially or fully hydrolysed poly(epihalohyrine-co-polyethylene oxide) and its derivatives, poly(vinyl chloride) and its derivatives, polyvinylsulfone and its derivatives, and polyether ether ketone and its derivatives.

23. (currently amended) A method for forming an hydrolytically stable isoelectric hydrogel material comprising:

mixing and/or reacting a single isoelectric compound having a ~~defined~~ pI of 1 to 12 with a mixture comprising an oligo- or polyhydroxy compound and a difunctional or oligofunctional agent, wherein after ~~incorporation of the single isoelectric compound into the hydrogel~~said mixing and/or reacting, the hydrolytically stable isoelectric hydrogel material formed thereby becomes an ampholytic material.

24. (currently amended) A method for forming an hydrolytically stable isoelectric hydrogel material comprising:

~~incorporating or grafting~~mixing and/or reacting a mixture comprising a single isoelectric compound having a ~~defined~~ pI of 1 to 12 ~~onto~~ with an oligomeric or polymeric scaffold, wherein the oligomeric or polymeric scaffold ~~that~~ can be subsequently turned into a hydrogel and/or membrane, ~~wherein~~ and whereby after ~~incorporation or grafting of the single isoelectric compound~~said mixing and/or reacting, the hydrolytically stable isoelectric hydrogel material becomes an ampholytic material.

25. (currently amended) A method for forming an hydrolytically stable hydrogel membrane comprising:

~~carrying out the method according to claim 23 or 24; and~~

applying ~~the~~ a hydrolytically stable isoelectric material prepared by the method

according to claim 23 onto an inert or crosslinkable or crosslinked supporting substrate ~~to form a hydrolytically stable hydrogel membrane~~.

26. (canceled).

27. (currently amended) ~~Use of hydrolytically stable hydrogel membrane according to any one of claims 1 to 20 in the separation~~A method of separating compounds by electrophoresis comprising introducing a mixture of compounds into a membrane-based electrophoresis apparatus comprising an anodic and/or cathodic membrane according to claim 21.